

**REMARKS**

Reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks is respectfully requested.

By this Amendment, claims 17 and 35 are amended to respectively incorporate the features of claims 18 and 36, and claims 18 and 36 are canceled accordingly without prejudice or disclaimer. Claims 33 and 37 are amended to depend from claims 17 and 35, respectively. Support for the amendments is believed found at least in the original specification, drawings, and claims. Accordingly, claims 17, 19-22, 24-35, and 37 are pending in this application.

**Rejections under § 112**

Claims 17 and 18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, it is asserted in the Office Action that the claims fail to provide sufficient antecedent basis for the recited “first flight duration,” “second flight duration,” and “third flight duration” when introducing the comparison units. Applicants respectfully traverse this rejection because, prior to introducing the comparison units in claims 17 and 18, the above-identified terms indeed have been introduced when introducing the trajectory prediction units. Reconsideration and withdrawal of the rejection under § 112 are respectfully requested.

**Rejections under § 103**

Claims 17-22 and 24-37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Meunier* (US 6,480,120) in view of Applicants’ background of the invention. Applicants respectfully traverse this rejection at least for the following reasons.

In the Office Action, it is asserted that the combination of units TPM1/VCM1 in *Meunier* corresponds to the recited first comparison unit, the combination of units TPM2/HCM2 in *Meunier* corresponds to the recited second comparison unit, and the combination of units TPM3/HCM3 in *Meunier* corresponds to the recited third comparison

unit. Applicants respectfully disagree with these assertions.

*Meunier* describes an airborne terrain collision prevention device having two lateral limit paths on two sides of the vertical plane of the flight path. See *Meunier*, Abstract, col. 9, ln. 39-55, and FIGs. 7-8. The collision prevention device in *Meunier* has a calculation block 4 including: (1) a first path prediction means TPM1 followed by a first comparison means in the vertical plane VCM1, (2) a second path prediction means TPM2 followed by a second comparison means operating laterally on one side of the vertical plane HCM2, and (3) a third path prediction means TPM3 followed by a third comparison means operating laterally on the other side of the vertical plane HCM2. See *Meunier*, col. 9, ln. 34-55. Therefore, the signal processing units TPM1/VCM1, TPM2/HCM2, and TPM3/HCM3 are implemented to perform anti-collision calculation based on different spatial limits.

In contrast, amended independent 17 recites, among other things, “a first comparison unit . . . for determining at least one first risk of collision of the aircraft with the ground corresponding to the first flight duration” and “a second comparison unit . . . for determining at least one second risk of collision of the aircraft with the ground corresponding to the second flight duration,” and “a third comparison unit . . . for determining at least one third risk of collision of the aircraft with the ground corresponding to the third flight duration,” which are implemented to operate based on different flight durations (emphasis added). Therefore, *Meunier* cannot reasonably be interpreted to describe the recited “first comparison units,” the “second comparison units,” and the “third comparison units.” Moreover, the Applicants’ background of the invention is silent with regard to at least the third comparison unit.

In addition, in the Office Action, it is acknowledged that *Meunier* fails to disclose the recited third safety surface corresponding to a third flight duration. The PTO appears to rely upon an inherency theory to state that the Applicants’ background of the invention inherently describes the third safety surface corresponding to the third flight duration. Particularly, it is stated in the Office Action that “these flight time periods can be used in multiple sectors across the aircraft trajectory” (emphasis added). See Office

Action, page 10. Applicants respectfully disagree with these assertions.

In order to rely upon a theory of inherency, the PTO is required to provide a factual basis and/or technical reasoning reasonably supporting the determination that the allegedly inherent characteristic necessarily flows from the prior art teaching. See *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). “The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ3d 1949, 1950-51 (Fed. Cir. 1999) (emphasis added). “A claim limitation is inherent in the prior art if it is necessarily present in the prior art, not merely probably or possibly present.” *Rosco v. Mirror Lite*, 304 F.3d 1373, 1380 (Fed. Cir. 2002). Therefore, although “flight time periods can be used in multiple sectors,” PTO still failed to provide sufficient support for the inherency assertion regarding the recited third safety surface corresponding to the third flight duration, as well as its corresponding hardware processing units. Rather, the PTO appears to only make a conclusory statement that it would have been obvious to modify *Meunier* in view of the Applicants’ background of the invention to implement the recited third safety surface corresponding to the third flight duration.

For at least the reasons discussed above, *Meunier* in view of the Applicants’ background of the invention fails to render independent claim 17 or dependent claims 19-22 and 24-35 obvious.

Amended independent claim 35 recites, among other things, “establishing, on the basis of said flight parameters, a third safety surface corresponding to a third predicted trajectory, the third safety surface having a third flight duration greater than the first flight duration,” “establishing a third topographic surface according to the flight parameters and the topographic data of terrain or obstacles,” and “comparing the third safety surface and the third topographic surface for determining a third risk of collision.” For at least reasons similar to those advanced above for independent claim 17, *Meunier* in view of the Applicants’ background of the invention fails to render independent claim 35

or dependent claim 37 obvious.

The cancellation of claims 18 and 36 renders the rejection of these claims moot. In view of the above, withdrawal of the rejection is respectfully requested.

### **Conclusion**

It is respectfully submitted that the application is in condition for allowance, and a Notice to that effect is earnestly solicited.

The Examiner is invited to telephone the undersigned, Applicants' attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

**LOWE HAUPTMAN HAM & BERNER, LLP**

/Kenneth M. Berner/

Kenneth M. Berner  
Registration No. 37,093

1700 Diagonal Road, Suite 300  
Alexandria, Virginia 22314  
(703) 684-1111  
(703) 518-5499 Facsimile  
Date: September 6, 2011  
KMB/TC/ser/mac